United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,452	10/31/2003	Frances Jiang	20-3-2-19	2851
	7590 07/13/2007 IORGAN & AMERSON		EXAMINER	
10333 RICHMOND, SUITE 1100		· Y	EWART, JAMES D	
HOUSTON, T	X 77042		ART UŅIT	PAPER NUMBER
			2617	
		•	MAIL DATE	DELIVERY MODE
			07/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/699,452	JIANG ET AL.			
Office Action Summary	Examiner	Art Unit			
	James D. Ewart	2617			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period variety or reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	I. nely filed the mailing date of this communication.			
Status					
 1) ⊠ Responsive to communication(s) filed on <u>June</u> 2a) ☐ This action is FINAL. 2b) ☒ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Example 1. 	action is non-final. nce except for formal matters, pro				
Disposition of Claims	·				
4) ☐ Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-18 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 30 January 2004 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. Sec tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Di 5) Notice of Informal F 6) Other:	ate			

Application/Control Number: 10/699,452 Page 2

Art Unit: 2617

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 29 June 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed 29 June 2007 have been fully considered but they are deemed to be most in view of new grounds of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2,5-7,10,11 & 14-18 are rejected under 35 U.S.C. 103(a) as being anticipated by Bondarenko et al. (U.S. Patent Publication No. 2002/0105957).

Application/Control Number: 10/699,452 Page 3

Art Unit: 2617

Referring to claims 1 and 10, Bondarenko et al. teaches a method of communication (0003 and 0016) comprising: accessing, in response to a request for a service (0016, requesting communication with an agent), information indicative of a potential delay in accessing the requested service (0017, Estimated Wait Time (EWT)), transmitting at least one message comprising delay information indicative of an estimated delay length associated with accessing the service (0063 and Figure 3, 73), the estimated delay length being determined based on the information indicative of the potential delay (0051, number of calls in queue – the greater the number the greater the delay) and previously collected information indicative of at least one delay in accessing the requested service (0051, average time per call- an estimate for any call in the queue).

Referring to claims 2 and 11, Bondarenko et al. further teaches wherein the estimated delay length comprises at least one time interval between a first instant corresponding with a received service request and a second instant corresponding with granting service access (0017, EWT).

Referring to claims 5 and 14, Bondarenko et al. further teaches wherein accessing said information indicative of the potential delay in accessing the requested service comprises accessing information indicative of at least one of traffic congestion, channel condition, system loading, processor occupancy, queuing delay (Figure 2, queue wait time), and scheduler delay.

Application/Control Number: 10/699,452

Art Unit: 2617

Referring to claim 6, Bondarenko et al. further teaches, comprising: determining, based on the previously collected information indicative of said at least one delay in accessing the requested service (0055), at least one pattern associated with the potential delay in accessing the requested service (0055 – disposal time per call) through an open loop network (0029, PSTN does not use power control feedback and is thus an open loop network) that comprises at least one of a wireline network and a wireless network (0029), and determining the estimated delay length based on the information indicative of the potential delay and said at least one pattern (Figure 2, # of calls in queue / potential delay and average time per call / pattern).

Referring to claim 7, Bondarenko et al. further teaches, wherein determining said at least one pattern comprises determining said at least one pattern based on at least one of traffic congestion, channel condition, system loading, processor occupancy, queuing delay (Figure 2, queue wait time), and scheduler delay associated with at least one previous request for the service.

Referring to claim 15, Bondarenko et al. further teaches wherein receiving said at least one message comprises receiving at least one message indicative of an estimated delay length associated with accessing the service (0017) through an open loop network (0029, PSTN does not use power control feedback and is thus an open loop network) comprising at least one of a wireline network and a wireless network (0029).

Referring to claim 16, Bondarenko et al. further teaches comprising: generating said information indicative of the potential delay associated with service access (0055, # of calls in queue).

Referring to claim 17, Bondarenko et al. further teaches, wherein generating said information indicative of the potential delay comprises generating information indicative of at least one of traffic, channel condition and service demand (0055, Demand - # of calls in queue).

Referring to claim 18, Bondarenko et al. further teaches comprising providing said information indicative of the potential delay (0055, a high estimated wait time would be indicative of a greater # in queue that a low estimated wait time).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 3,4,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable by Bondarenko et al. in view of Buford et al. (U.S. Patent No. 5,945,948).

Referring to claims 3 and 12, Bondarenko et al. teaches the limitations of claims 3 and 12, but do not teach wherein the service request is autonomous and generated at a predefined

moment in time. Buford et al. teaches wherein the service request is autonomous and generated at a predefined moment in time (Column 17, Lines 63-65). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Bondarenko et al. with the teaching of Buford et al. wherein the service request is autonomous and generated at a predefined moment in time to automatically send new access requests when requests are not received (Column 17, Lines 63-65).

Referring to claims 4 and 13, Buford et al. further teaches wherein the predefined moment in time comprises at least one of a periodic (Column 17, Lines 63-65) and an a periodic instant. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Bondarenko et al. with the teaching of Buford et al. wherein the mode is transmit diversity and a controller that stops one or both of the first receive processing and the second receive processing depending on the timing detected in the detector to access transmission performance and use it to select a transmission mode (Column 1, Lines 6-9)

5. Claims 3,4,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable by Bondarenko et al. in view of Shtivelman (U.S. Patent No. 6,157,655).

Referring to claim 8, Bondarenko et al. teaches the limitations of claim 8, but does not teach wherein determining said at least one pattern comprises determining said at least one pattern based on a heuristic technique. Shtivelman teaches wherein determining said at least one pattern comprises determining said at least one pattern based on a heuristic technique (Column 4,

Application/Control Number: 10/699,452 Page 7

Art Unit: 2617

Lines 9-14 and Lines 34-48). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Bondarenko et al. with the teaching of Shtivelman wherein determining said at least one pattern comprises determining said at least one pattern based on a heuristic technique to provide users with better approximated wait times (Column 5, Lines 31-32).

Referring to claim 9, Bondarenko et al. teaches the limitations of claim 9, but does not teach determining at least one pattern indicating a time variation of the potential delay in accessing the requested service. Shtivelman teaches determining at least one pattern indicating a time variation of the potential delay in accessing the requested service (Column 4, Lines 9-14 and Lines 34-48). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Bondarenko et al. with the teaching of Shtivelman of determining at least one pattern indicating a time variation of the potential delay in accessing the requested service to provide users with better approximated wait times (Column 5, Lines 31-32).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571)

Art Unit: 2617

272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

James Ewart

July 5, 2007

WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600